

CLAIMS

What is claimed is:

AI

1. A portable electronic device comprising:
an imager coupled to the portable electronic device;
a laser scanner coupled to the portable electronic device; and
an application specific integrated circuit (ASIC) comprising circuitry for communicating with the imager and laser scanner.
2. The portable electronic device of claim 1, further comprising a data blender adapted to receive data from multiple sources and distribute the data to multiple destinations based on a type or content of the data.
3. The portable electronic device of claim 1, the portable electronic device being a bar code reading terminal.
4. The portable electronic device of claim 1, the ASIC further comprising circuitry for carrying out at least one of the following functions:
power management;
wake up control and power down;
critical suspend shutdown;
warm boot and cold boot;
serial port for WAN radio;
matrix keyboard scanning;
IP security;
analog converters;
touch panel;
smart and dumb battery;
modular memory IDE interface;

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fingerprint reader;
 USB host; and
 magnetic stripe interface.

5. The ASIC of claim 4, the smart and dumb battery function including a gas gauging function

6. The ASIC of claim 4, the smart and dumb battery function including a cycle life function.

7. The ASIC of claim 4, the smart and dumb battery function including a charge control function.

8. The ASIC of claim 4, the smart and dumb battery being a Ni-MH battery.

9. The ASIC of claim 4, the smart and dumb battery being a Li-Ion battery.

10. The ASIC of claim 4, the modular memory IDE interface function including a NAND memory function.

11. The ASIC of claim 4, the modular memory IDE interface function including a CF card function.

12. A portable data collection system, comprising:
 a bar code reading terminal;
 a data blender adapted to receive data from multiple sources and distribute the data to multiple destinations based on a type or content of the data; and
 an application specific integrated circuit (ASIC) having circuits for communicating with an imager and a laser scanner and at least one of the following functions:

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power management;
wake up control and power down;
critical suspend shutdown;
warm boot and cold boot;
serial port for WAN radio;
matrix keyboard scanning;
IP security;
analog converters;
touch panel;
smart and dumb batteries;
modular memory IDE interface;
fingerprint reader;
USB host; and
magnetic stripe interface.

13. The system of claim 12 providing a shared data path into a system memory for both the laser scanner and the imager data.

14. An application specific integrated circuit (ASIC) having circuits for communicating with an imager and a laser scanner and at least one of the following functions:

power management;
wake up control and power down;
critical suspend shutdown;
warm boot and cold boot;
serial port for WAN radio;
matrix keyboard scanning;
IP security;
analog converters;
touch panel;

smart and dumb batteries;
modular memory IDE interface;
fingerprint reader;
USB host; and
magnetic stripe interface.

15. A portable data collection system, comprising:
a bar code reading terminal; and
an application specific integrated circuit (ASIC) having circuits for implementing
the following functions:

laser scanning;
imaging;
power management;
wake up control and power down;
critical suspend shutdown;
warm boot and cold boot;
serial port for WAN radio;
matrix keyboard scanning;
IP security;
analog converters;
touch panel;
smart and dumb batteries;
modular memory IDE interface;
fingerprint reader;
USB host; and
magnetic stripe interface.

16. The portable data collection system of claim 15, further comprising a data
blender adapted to receive data from multiple sources and distribute the data to multiple
destinations based on a type or content of the data.

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17. The portable data collection system of claim 16, the data from the multiple sources being decoded within the system.

18. The portable data collection system of claim 17, the data from the multiple sources being decoded offline and processed on the bar code reading terminal at a later time.

19. The portable data collection system of claim 16, the data from the multiple sources being routed through a common driver.

20. The portable data collection system of claim 16, the data from the multiple sources being at least one of biometrics data, magstripe data, and RFID data.

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